



MARYLAND Department of Health

Larry Hogan, Governor · Boyd Rutherford, Lt. Governor · Dennis Schrader, Secretary

August 04, 2017

Public Health Preparedness and Situational Awareness Report: #2017:30 **Reporting for the week ending 07/29/17 (MMWR Week #30)**

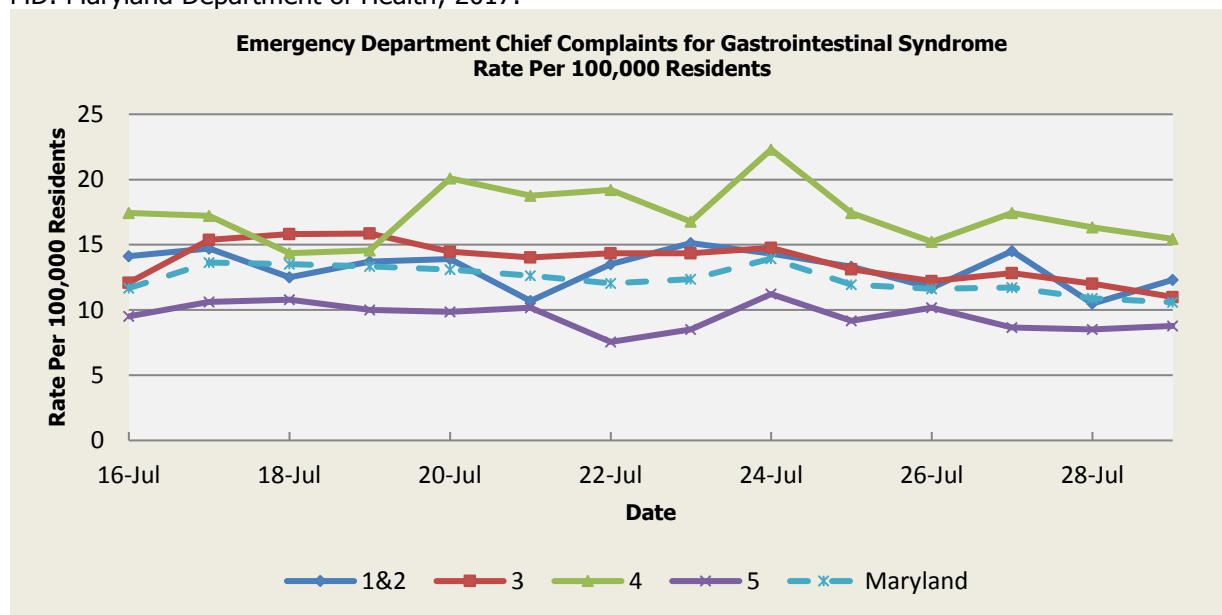
CURRENT HOMELAND SECURITY THREAT LEVELS

National: No Active Alerts

Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

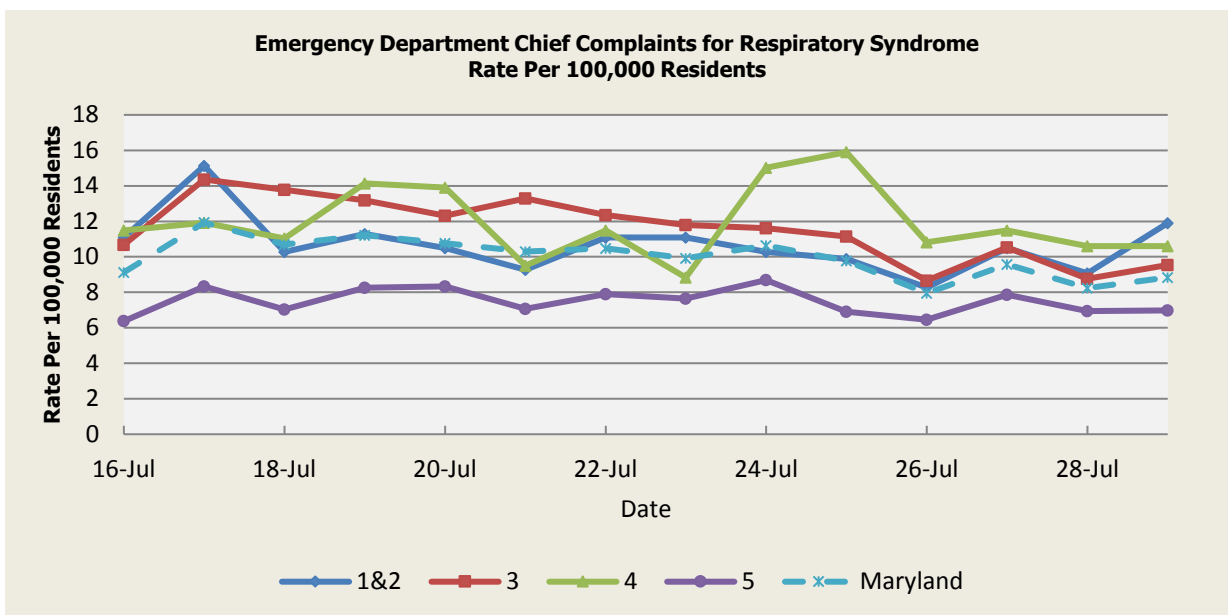
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the "Other" category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2017.



There was one (1) Gastrointestinal Syndrome outbreak reported this week: one (1) outbreak of Gastroenteritis associated with a Daycare Center (Region 3).

Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	12.49	14.61	14.93	9.96	12.68
Median Rate*	12.91	14.80	15.02	10.22	12.95

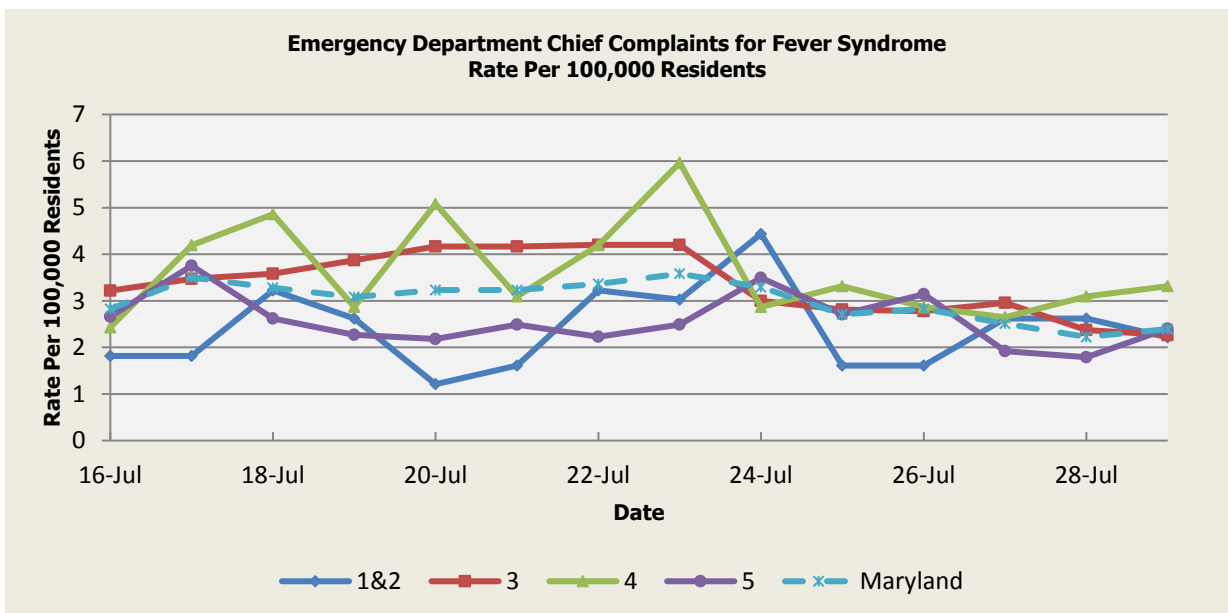
* Per 100,000 Residents



There were no Respiratory Syndrome outbreaks reported this week.

Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.66	13.98	13.88	9.64	12.11
Median Rate*	11.70	13.88	13.91	9.65	12.05

* Per 100,000 Residents

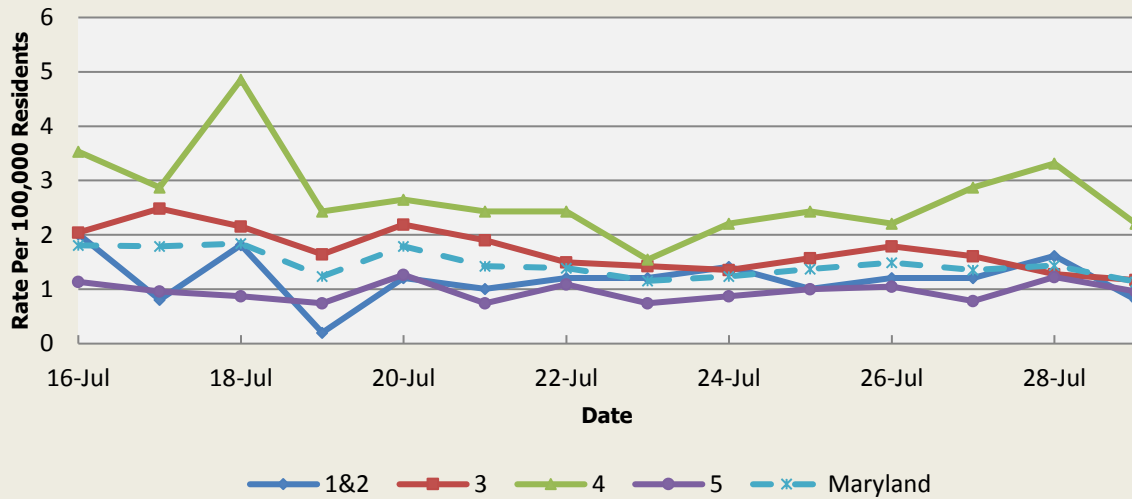


There were no Fever Syndrome outbreaks reported this week.

Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.93	3.75	3.85	2.98	3.39
Median Rate*	2.82	3.76	3.75	2.97	3.40

Per 100,000 Residents

Emergency Department Chief Complaints for Localized Lesion Syndrome Rate Per 100,000 Residents



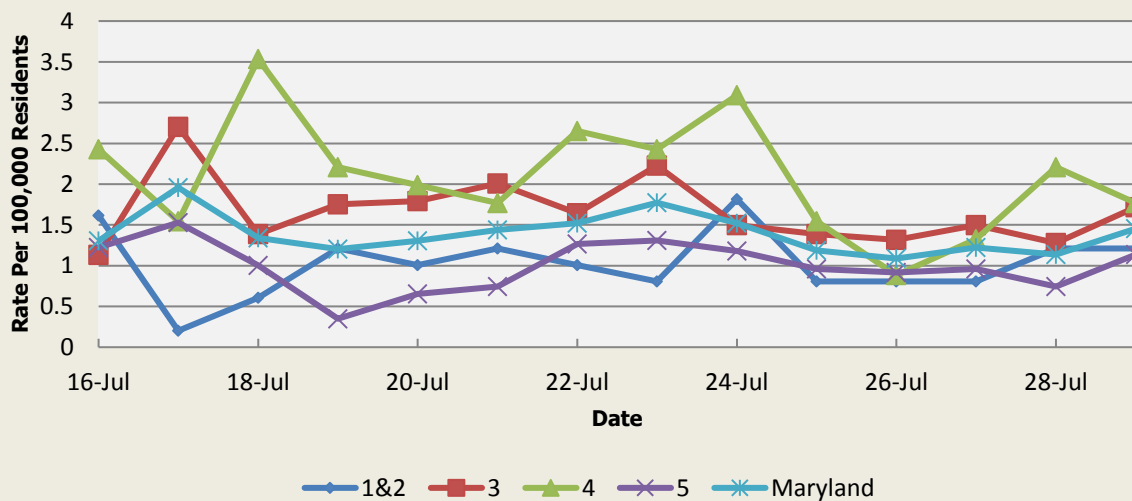
There were no Localized Lesion Syndrome outbreaks reported this week.

Localized Lesion Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.01	1.83	1.96	0.93	1.43
Median Rate*	1.01	1.83	1.99	0.92	1.42

* Per 100,000 Residents

Emergency Department Chief Complaints for Rash Syndrome Rate Per 100,000 Residents

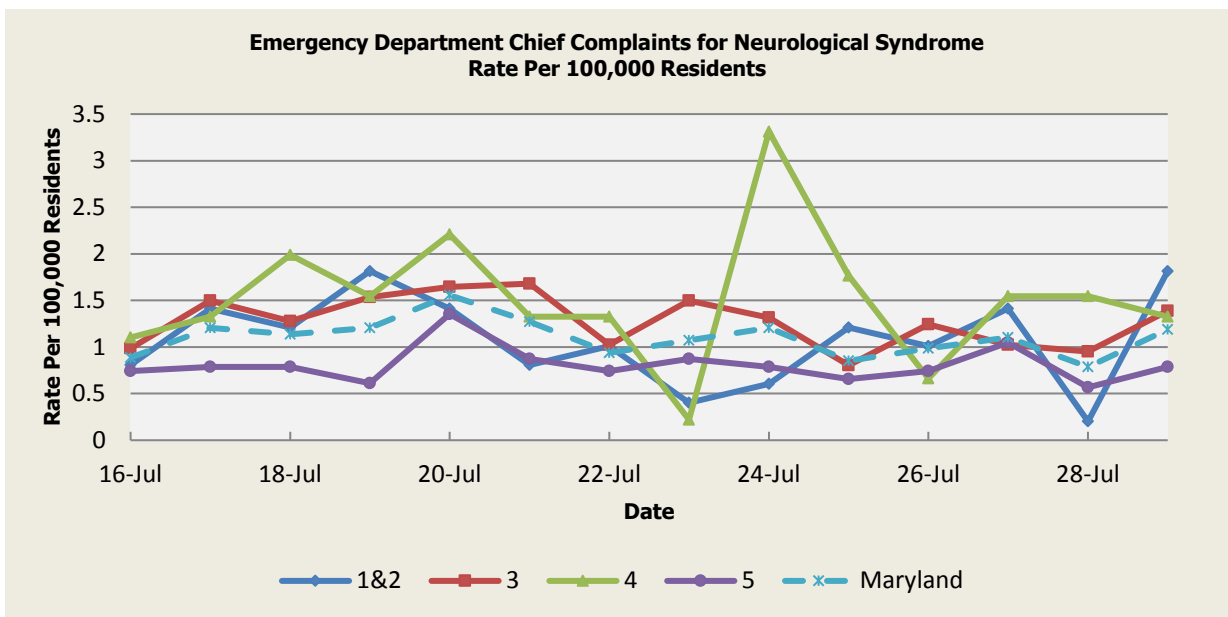


There were no Rash Syndrome outbreaks reported this week.

Rash Syndrome Baseline Data January 1, 2010 - Present

Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.21	1.69	1.71	0.99	1.39
Median Rate*	1.21	1.68	1.77	1.00	1.39

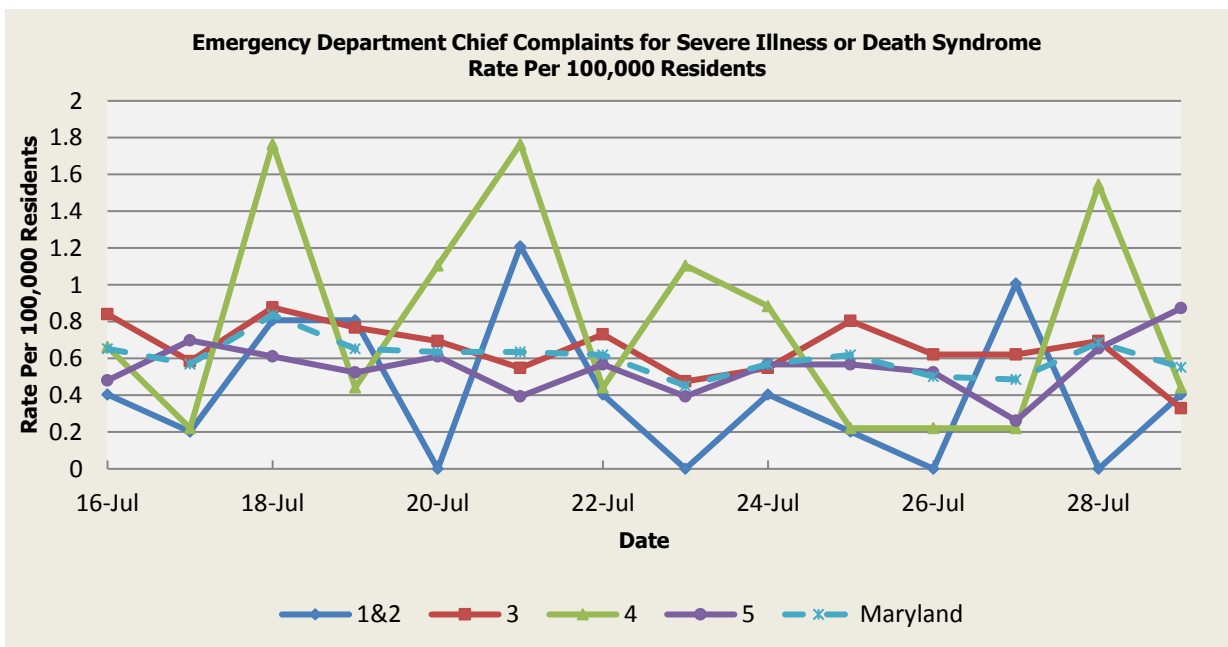
* Per 100,000 Residents



There were no Neurological Syndrome outbreaks reported this week.

Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.77	0.66	0.49	0.64
Median Rate*	0.60	0.69	0.66	0.48	0.59

* Per 100,000 Residents

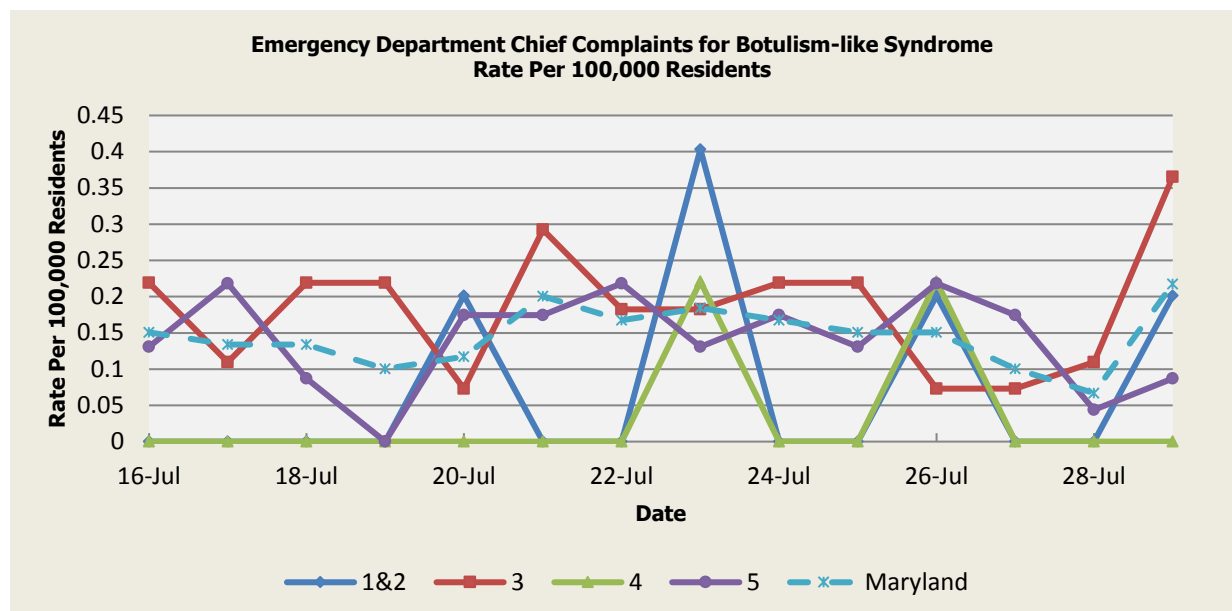


There were no Severe Illness or Death Syndrome outbreaks reported this week.

Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.63	0.89	0.78	0.44	0.69
Median Rate*	0.60	0.91	0.66	0.44	0.70

* Per 100,000 Residents

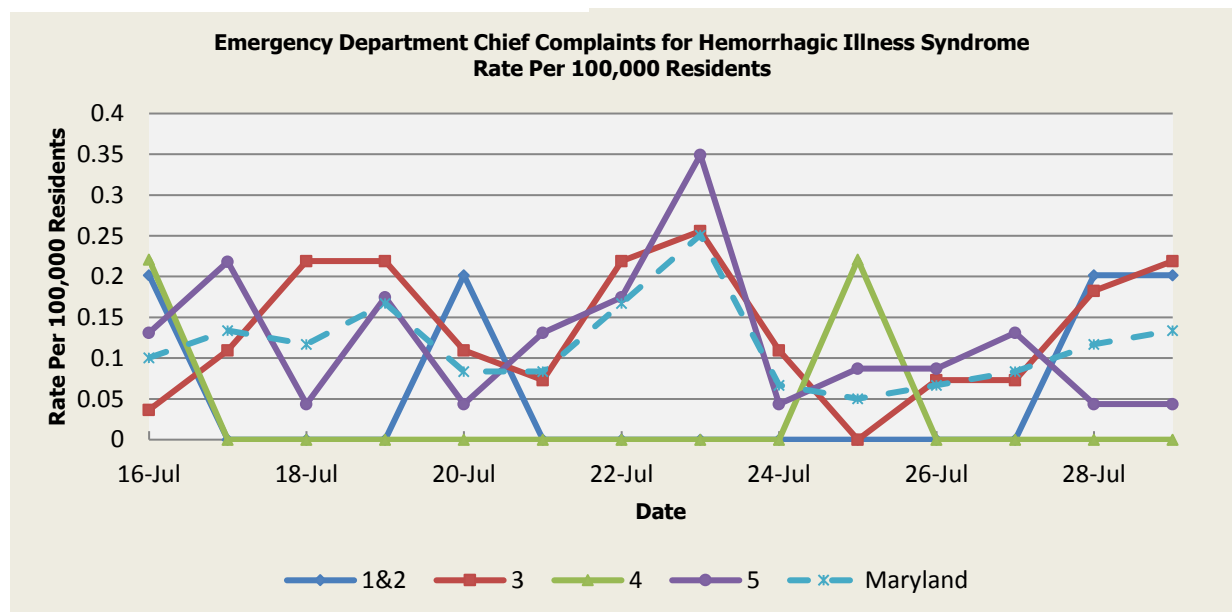
SYNDROMES RELATED TO CATEGORY A AGENTS



There was an appreciable increase above baseline in the rate of ED visits for Botulism-like Syndrome on 07/16 (Regions 3,5), 07/17 (Region 5), 07/18 (Region 3), 07/19 (Region 3), 07/20 (Regions 1&2,5), 07/21 (Region 3), 07/22 (Regions 3,5), 07/23 (Regions 1&2,3,4,5), 07/24 (Regions 3,5), 07/25 (Regions 3,5), 07/26 (Regions 1&2,4,5), 07/27 (Region 5), 07/29 (Regions 1&2,3). These increases are not known to be associated with any outbreaks.

Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.06	0.09	0.04	0.06	0.07
Median Rate*	0.00	0.07	0.00	0.04	0.05

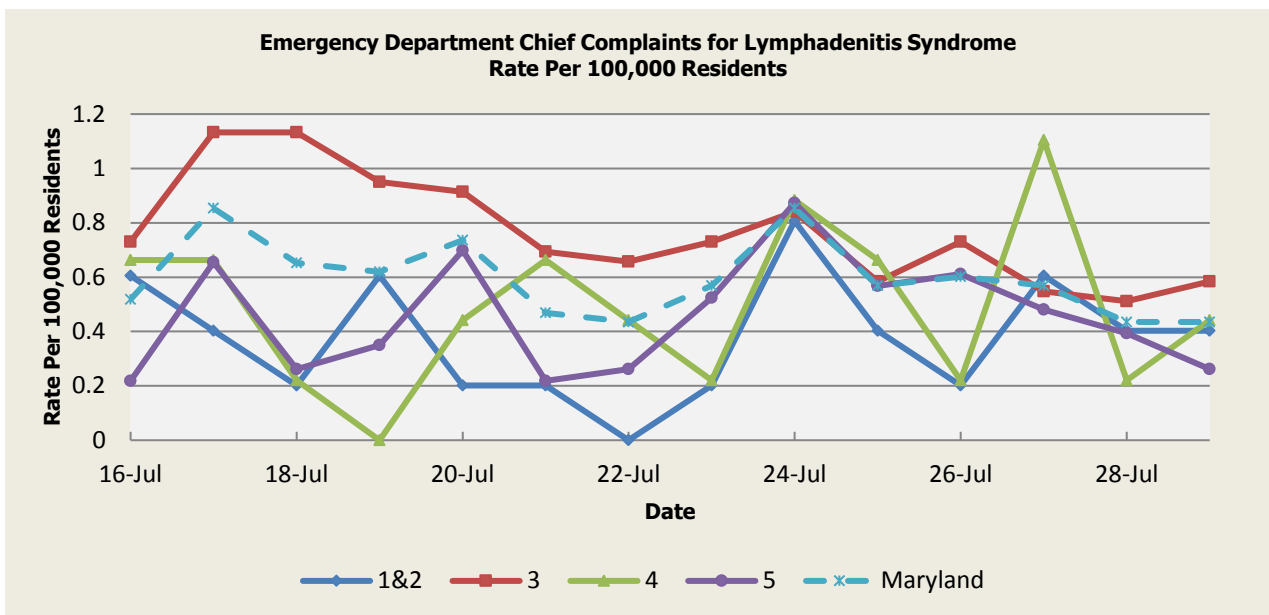
* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Hemorrhagic Illness Syndrome on 07/16 (Regions 1&2,4), 07/17 (Region 5), 07/20 (Regions 1&2), 07/23 (Region 3), 07/25 (Region 4), 07/28 (Regions 1&2), 07/29 (Regions 1&2). These increases are not known to be associated with any outbreaks.

Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.03	0.12	0.03	0.09	0.10
Median Rate*	0.00	0.04	0.00	0.04	0.05

* Per 100,000 Residents



There was an appreciable increase above baseline in the rate of ED visits for Lymphadenitis Syndrome on 07/16 (Regions 1&2), 07/17 (Regions 3,5), 07/18 (Region 3), 07/19 (Regions 1&2), 07/20 (Region 5), 07/24 (Regions 1&2,4,5), 07/27 (Regions 1&2,4). These increases are not known to be associated with any outbreaks.

Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.30	0.51	0.34	0.31	0.40
Median Rate*	0.20	0.40	0.22	0.26	0.33

* Per 100,000 Residents

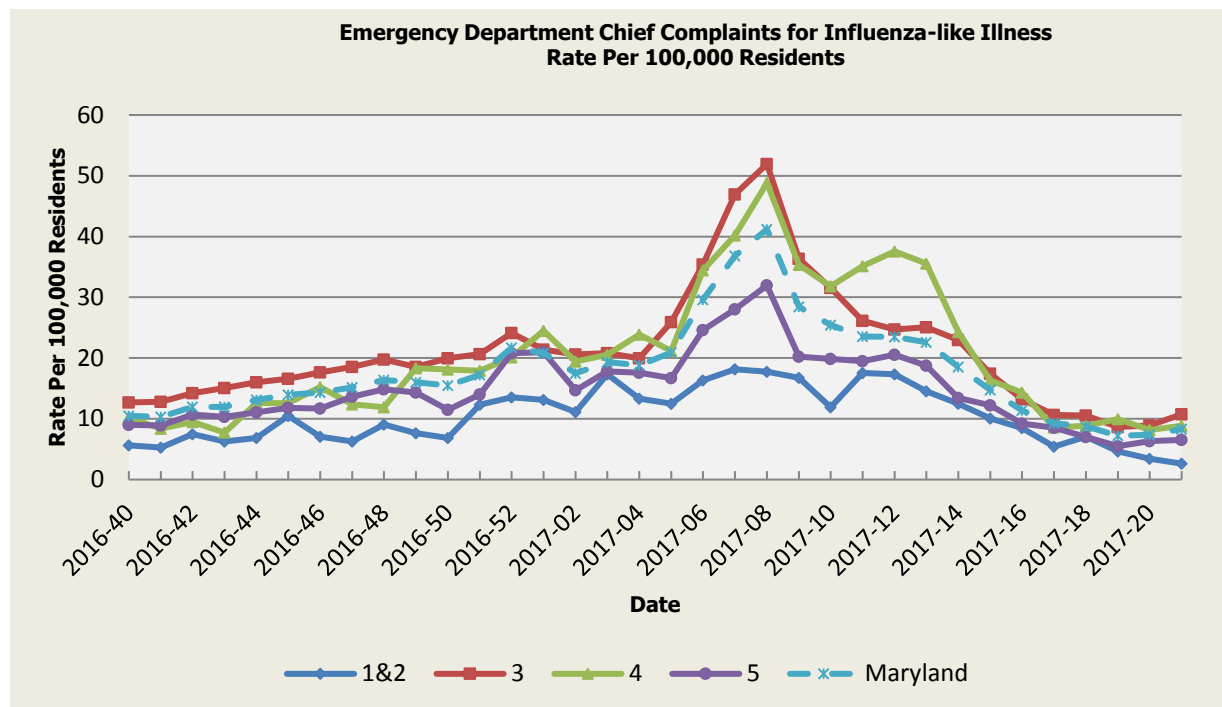
MARYLAND REPORTABLE DISEASE SURVEILLANCE

Condition	Counts of Reported Cases†					
	July			Cumulative (Year to Date)**		
Vaccine-Preventable Diseases	35	49.4	42	178	237.6	221
Aseptic meningitis	0	0.2	0	4	3.2	3
Meningococcal disease	0	0	0	4	3.8	3
Measles	1	1.4	1	21	34.6	14
Mumps	0	0.2	0	1	3.8	3
Rubella	18	27.6	30	133	179.8	188
Pertussis	2017	Mean*	Median*	2017	Mean*	Median*
Foodborne Diseases	85	128.2	122	420	503	493
Salmonellosis	19	18.6	17	144	118.8	144
Shigellosis	75	100.2	106	466	450.8	462
Campylobacteriosis	22	20	19	97	86.6	85
Shiga toxin-producing Escherichia coli (STEC)	2	3.2	2	14	8.6	7
Listeriosis	2017	Mean*	Median*	2017	Mean*	Median*
Arboviral Diseases	1	0.8	0	1	3.6	2
West Nile Fever	417	488.6	510	2062	1875	1821
Lyme Disease	2017	Mean*	Median*	2017	Mean*	Median*
Emerging Infectious Diseases	0	0.6	0	0	2.6	0
Chikungunya	1	3.4	2	7	16.2	10
Dengue Fever	0	2.8	1	1	8.6	5
Zika Virus***	2017	Mean*	Median*	2017	Mean*	Median*
Other	14	23.2	27	121	100.6	96
Legionellosis	35	49.4	42	178	237.6	221

NEDSS data: Maryland National Electronic Disease Surveillance System (NEDSS). Baltimore, MD: Maryland Department of Health; 2017. † Counts are subject to change *Timeframe of 2011-2017**Includes January through current month. *** As of August 03, 2017, the total [Maryland Confirmed and Probable Cases of Zika Virus Disease and Infection](#) for 2017 is 44.

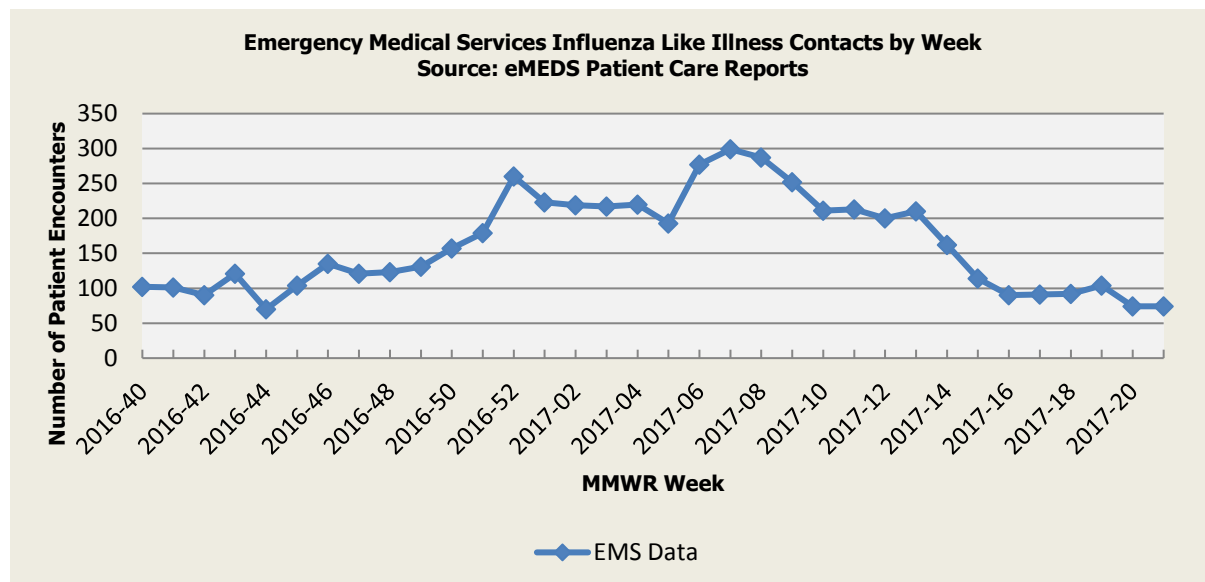
SYNDROMIC INFLUENZA SURVEILLANCE

Seasonal Influenza reporting occurs from MMWR Week 40 through MMWR Week 20 (October through May).



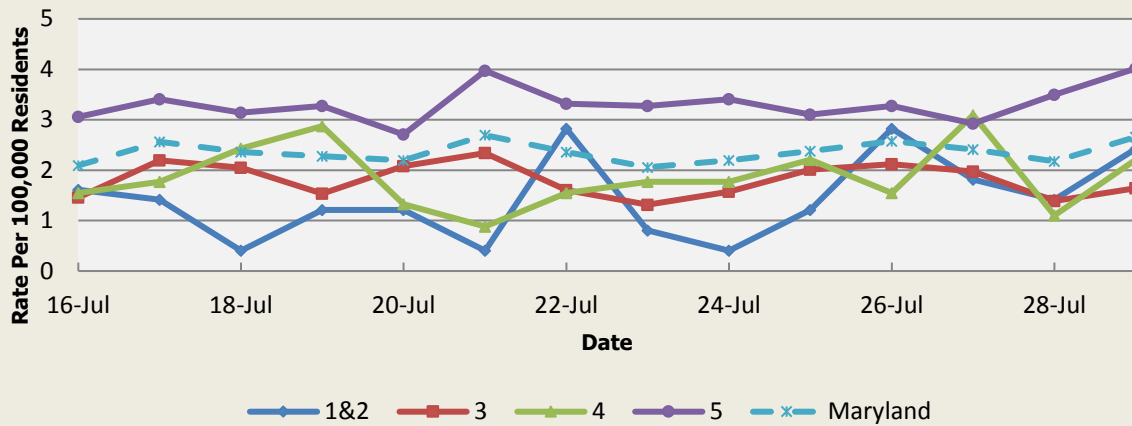
Influenza-like Illness Baseline Data Week 1 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	167.70	223.96	205.49	194.23	206.50
Median Rate*	7.66	9.63	9.05	8.51	9.00

* Per 100,000 Residents



Disclaimer on eMEDS flu related data: These data are based on EMS Pre-hospital care reports where the EMS provider has selected "flu like illness" as a primary or secondary impression of a patient's illness. This impression is solely based on the signs and symptoms seen by the provider, not on any diagnostic tests. Since these numbers do not include all primary or secondary impressions that may be seen with influenza the actual numbers may be low. These data are reported for trending purposes only.

**Over-the-Counter Medication Sales Related to Influenza
Rate Per 100,000 Residents**

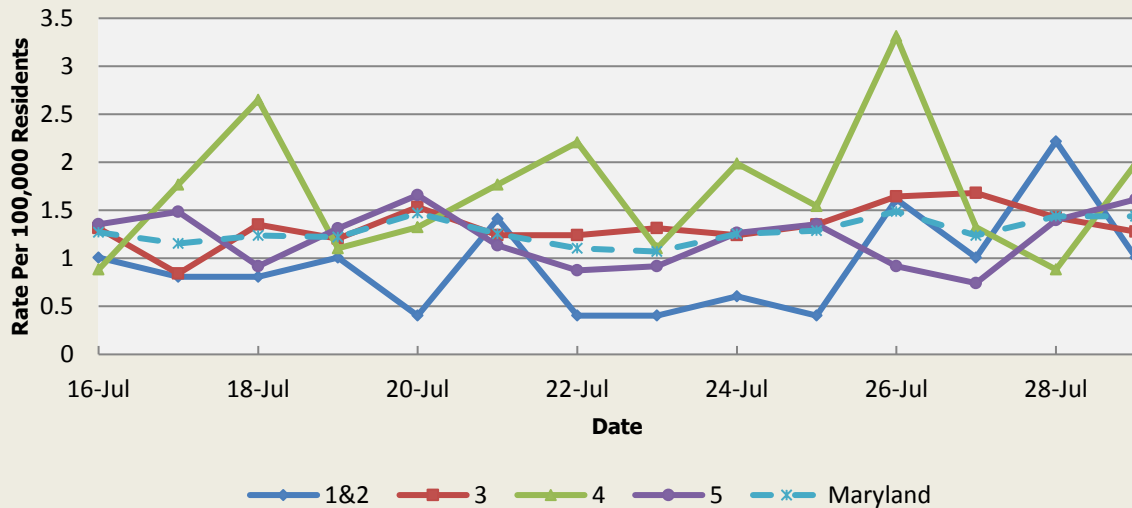


There was not an appreciable increase above baseline in the rate of OTC medication sales during this reporting period.

OTC Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.65	4.75	2.64	8.17	5.81
Median Rate*	3.23	4.38	2.43	8.03	5.52

* Per 100,000 Residents

**Over-the-Counter Thermometer Sales
Rate Per 100,000 Residents**



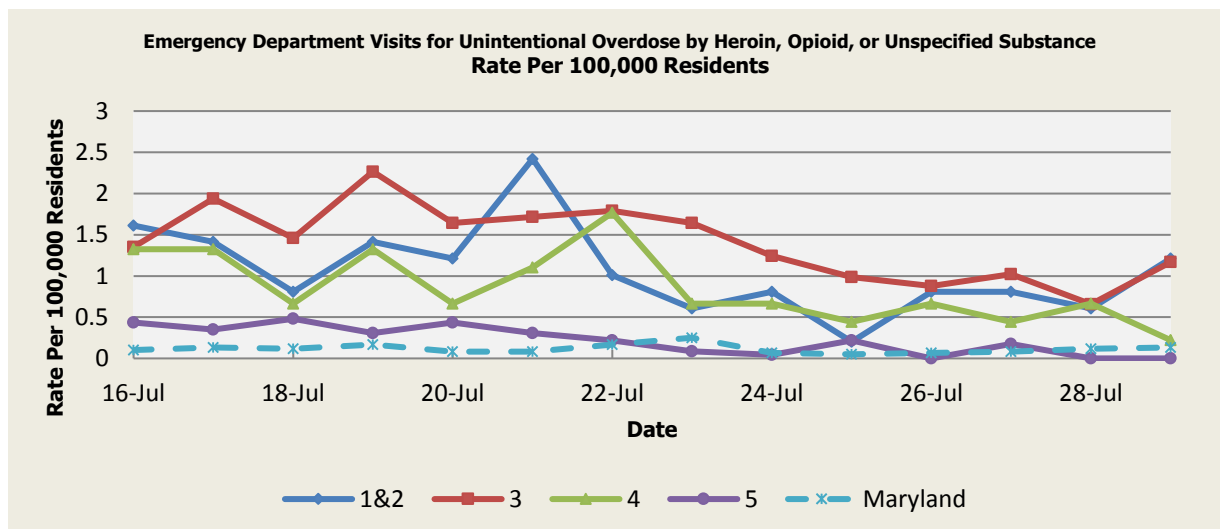
There was not an appreciable increase above baseline in the rate of OTC thermometer sales during this reporting period.

Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	3.26	3.12	2.42	4.18	3.49
Median Rate*	3.02	3.03	2.43	4.06	3.36

* Per 100,000 Residents

SYNDROMIC OVERDOSE SURVEILLANCE

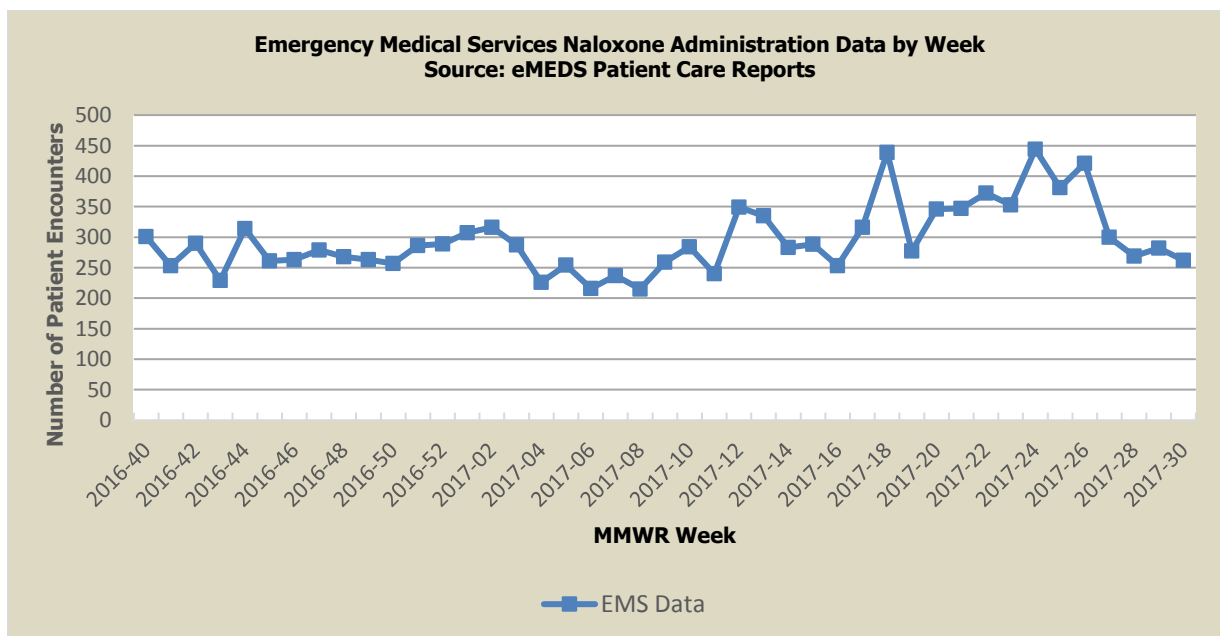
The purpose of this section is to characterize non-fatal ED visit trends for acute unintentional overdose by Heroin, Opioid or Unspecified substance among Maryland residents captured by ESSENCE data, including chief complaint and discharge diagnosis. ED visits that are identified as unintentional overdose by Heroin, Opioid or Unspecified substance include those with medical and non-medical use of a prescription Opioid or where the substance is not specified, given evidence that the majority of fatal overdoses are Opioid-related.



Disclaimer on ESSENCE Overdose related data: ESSENCE chief complaint and discharge diagnosis query for overdose-related illness includes but is not limited to the following terms: heroin, opioid, speedball, dope, fentanyl, naloxone, narcan, and overdose.

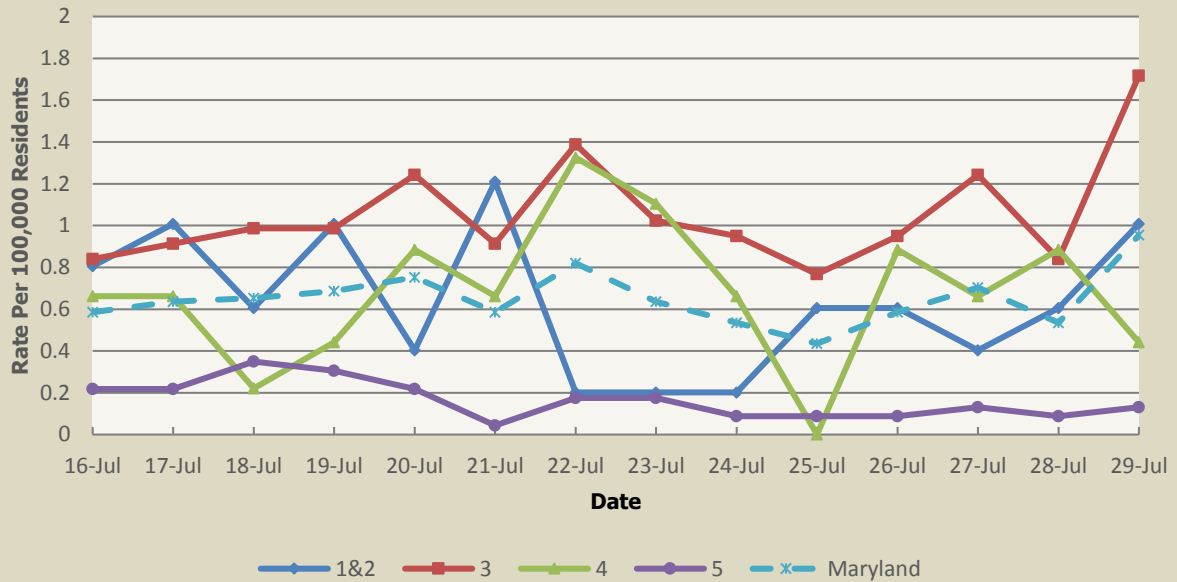
Non-fatal Overdose ED Visit Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.41	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents



Disclaimer on eMEDS naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

Emergency Medical Services Naloxone Administration Data
Rate Per 100,000 Residents
Source: eMEDS Patient Care Reports



Disclaimer on eMEDS Naloxone administration related data: These data are based on EMS Pre-hospital care reports where the EMS provider has documented that they administered naloxone. The administration of naloxone is based on the patient's signs and symptoms and not on any diagnostic tests. These data are reported for trending purposes only.

EMS Naloxone Administration Data Baseline Data January 1, 2017 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.31	0.41	0.36	0.14	0.29
Median Rate*	1.01	1.32	1.10	0.48	0.99

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of June 15, 2017, the WHO-confirmed global total (2003-2017) of human cases of H5N1 avian influenza virus infection stands at 859, of which 453 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA:

There were no reports of avian influenza in the United States or internationally at the time that this report as compiled.

HUMAN AVIAN INFLUENZA:

There were no reports of avian influenza in the United States or internationally at the time that this report as compiled.

NATIONAL DISEASE REPORTS:

INFLUENZA, CANINE (TEXAS), 30 July 2017, There's a highly contagious strain of dog flu going around, according to KXAN. The news station reports that veterinarians are warning dog owners about H3N2, a highly contagious strain of canine influenza spreading through central Texas. Almost all dogs exposed to the virus will contract it, and 80 percent will show signs. Vaccinations don't completely protect dogs from H3N2, though the virus is rarely deadly. Read More:

<https://www.promedmail.org/post/5214822>

INFLUENZA, SWINE (OHIO), 30 July 2017, In recent weeks, Ohio county fairs reported swine H3N2, prompting closure of the pig exhibitions. According to a Centers for Disease Control and Prevention (CDC) FluView published today [28 Jul 2017], 11 human infections with novel influenza A viruses were detected in Ohio during the week of 16 Jul 2017. All 11 persons were infected with influenza A (H3N2) variant (H3N2v) viruses and reported exposure to swine in a fair setting during the week preceding illness onset. Ten of the 11 patients were children less than 18 years of age, and one patient was an adult aged 50-64 years. None were hospitalized, and all have fully recovered from their illness. Read More: <https://www.promedmail.org/post/5215014>

E. COLI EHEC (UTAH, ARIZONA), 30 July 2017, Infected animals are the likely cause of an *E. coli* [O157] outbreak that killed 2 children and sickened 10 others recently in Hildale, Utah and adjoining Arizona communities, health officials said on Fri 28 Jul 2017. The news release from the Southwest Utah Public Health Department referred to the animals as "livestock," but did not provide further description. While livestock were likely the source, person-to-person contact spreads the bacterium, the news release said. Read More: <https://www.promedmail.org/post/5215421>

VIBRIO VULNIFICUS (FLORIDA) 30 July 2017, The 1st case involved a Mobile County resident who consumed raw oysters in another state in March 2017. The 2nd incident took place in April 2017 and also involved the consumption of raw oysters while in Mobile County. An investigation confirmed that the oysters were imported from another state and were not harvested locally. Read More: <https://www.promedmail.org/post/5215578>

EASTERN EQUINE ENCEPHALITIS (WISCONSIN), 30 July 2017, Two horses died this week after being infected with eastern equine encephalitis virus (EEE or EEEv), a severe, mosquito-borne disease, in the Tomah area, according to the Wisconsin Veterinary Diagnostic Lab. The lab, housed at UW-Madison, discovered eastern equine encephalitis virus in the brain tissue of the horses, which were last vaccinated in the fall of 2016. The virus is deadly in horses about 90 percent of the time. Read More: <https://www.promedmail.org/post/5216046>

E. COLI EHEC (CALIFORNIA), 31 July 2017, The family of a boy who was hospitalized for *Escherichia coli* infection after swimming in a popular Northern California lake is speaking out. According to the Nevada County Public Health Department, 5 children have gotten sick - 3 of them testing positive for *E. coli*. The county says all of them had been swimming at Lake Wildwood Beach near Grass Valley. Read More: <https://www.promedmail.org/post/5217061>

VIBRIO VULNIFICUS (VIRGINIA), 31 July 2017, A Virginia woman may lose her finger after contracting a flesh-eating bacterium, *Vibrio vulnificus*, while swimming in a river. The Richmond Times-Dispatch reports that the 61 year old took her grandchildren swimming in the Rappahannock River, a day after her cat had scratched her finger. Read More: <https://www.promedmail.org/post/5217427>

CYCLOSPORIASIS (TEXAS), 1 Aug 2017, Less than 2 weeks after issuing health advice, the Texas Department of State Health Services (DSHS) is reporting 145 cases of infection with the parasite, cyclospora. Cyclosporiasis is an intestinal illness caused by consuming food or water contaminated with the microscopic cyclospora parasite. The main symptom is watery diarrhea lasting a few days to a few months. Additional symptoms may include loss of appetite, fatigue, weight loss, abdominal cramps, bloating, increased gas, nausea, vomiting, and a low fever. Read More: <https://www.promedmail.org/post/5219001>

HEPATITIS A (CALIFORNIA), 2 Aug 2017, Outbreaks of Hepatitis A among the homeless populations in San Diego and Santa Cruz counties prompted an alert by Los Angeles County health officials Monday [1 Aug 2017] to urge physicians and health care workers to look for and report any confirmed cases. The alert was issued because the disease has the potential to spread to Los Angeles County, health officials warned. The outbreaks in San Diego and Santa Cruz counties are among homeless people who may or may not be using drugs and is being spread "person-to-person through close contact or through contact with a fecally contaminated environment," according to the alert. Read More: <https://www.promedmail.org/post/5222462>

INTERNATIONAL DISEASE REPORTS:

INFLUENZA H1N1 (MYANMAR), 30 July 2017, Six people have died in an outbreak of H1N1 influenza largely hitting Myanmar's biggest city, Yangon, a health official said on Thursday [27 Jul 2017] amid government efforts to track the spread of the virus known as swine flu. Two 5-year-old girls died on Tuesday at a children's hospital in Yangon, said Thinzar Aung, deputy director of the infectious diseases department at the Ministry of Health and Sport. Read More: <https://www.promedmail.org/post/5215024>

SALMONELLOSIS, SEROTYPE TYPHIMURIUM (BRAZIL), 30 July 2017, An invasive and virulent strain of *Salmonella enterica serotype Typhimurium* that emerged in Sub-Saharan Africa has been identified elsewhere for the 1st time, scientists have reported. The bacteria can cause a severe gut infection with symptoms including fever, nausea and vomiting. It can even cause death. The strain, known as ST313 [ST is short for sequence type], has been found in Brazil, reports an article in the July 2017 edition of the journal *Infection, Genetics and Evolution*. Until now, it had been recorded only in Sub-Saharan Africa, where it kills a quarter of people who fall ill, particularly vulnerable patients

infected with HIV or malaria, and malnourished children. Read More: <https://www.promedmail.org/post/5215415>

HANTAVIRUS (MOZAMBIQUE), 1 Aug 2017, This is the first serological investigation of hantavirus in Mozambique. Mozambicans are exposed to hantaviruses. Hantavirus cases presented significantly higher levels of creatinine and alanine aminotransferase. Clinicians are unaware of hantaviruses and the virus occurs unsuspected with most cases of hantavirus infections are misdiagnosed as malaria. Read More: <https://www.promedmail.org/post/5218861>

BOTULISM (CHINA), 1 Aug 2017, A female patient, aged 33 with underlying illness, has developed blurred vision, dizziness, generalised weakness, and shortness of breath after receiving injections of botulinum toxin locally. Initial enquiries revealed that the patient had received botulinum toxin injections at both calves in a beauty premises in Tsim Sha Tsui on 12 Jul 2017. Read More: <https://www.promedmail.org/post/5219480>

JAPANESE ENCEPHALITIS (INDIA), 1 Aug 2017, It was reported that the situation is not alarming but the positive cases are showing an increasing trend. About 73 cases have been detected positive for Japanese encephalitis (JE). Chief minister of Manipur, Mr Biren, said the situation is alarming and it needs to be attended to immediately. [An official] said he instructed the district officials to arrange transport facilities to move the patients to district headquarters or the state capital for medical treatment. Read More: <https://www.promedmail.org/post/5216309>

WEST NILE FEVER (GREECE), 1 Aug 2017, Since the beginning of the 2017 transmission season and as of 27 Jul 2017, 5 human cases of West Nile fever (one confirmed and 4 probable) have been reported by Greece. In the neighboring countries, one confirmed case and 3 probable cases have been reported; all of them were reported by Israel. Read More: <https://www.promedmail.org/post/5221450>

HANTAVIRUS (MACEDONIA) 2 Aug 2017, Test results from 2 labs have identified the hantavirus as a cause of death of a father and son from Simnica village near Grostivar. Hantavirus infection in humans can result in hemorrhagic fever with renal syndrome. Fortunately, the identified virus is one of the least harmful types, namely, it does not transfer from person to person but only through contact with rodent urine, saliva and feces. Read More: <https://www.promedmail.org/post/5221702>

HEPATITIS A (PORTUGAL) 2 Aug 2017, In a follow-up to the hepatitis A outbreak in Portugal, 402 cases have been confirmed since the beginning of 2017, according to local media. The majority of cases occurred in the Lisbon and Tagus Valley regions. This is up from 322 cases one month ago. Read More: <https://www.promedmail.org/post/5222364>

MERS-COV (SAUDI ARABIA), 2 Aug 2017, There have been a total of 1680 laboratory-confirmed cases of MERS-CoV infection, including 681 deaths, 987 recoveries, and 11 currently active infections. Read More: <https://www.promedmail.org/post/5223376>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website:
<http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

